

REMARKS/ARGUMENTS

Claims 1-80 were pending in the present application. By virtue of this response, no claims have been cancelled or added, and claim 44 has been amended. Accordingly, claims 1-80 are currently under consideration. Amendment and cancellation of certain claims is not to be construed as a dedication to the public of any of the subject matter of the claims as previously presented. No new matter has been added.

Rejections under 35 U.S.C. 103(a)

Claims 1-80 (all pending claims) are rejected as allegedly being unpatentable over Klaassen et al. in view of Gschwendtner et al. (U.S. Patent no. 5,400,824). Because neither reference nor any hypothetical combination thereof discloses each of the elements of any independent claim of the present application, Applicant respectfully traverses this rejection.

Claim 1 recites at least a microvalve comprising a first layer, a second layer defining a flow area, and a third layer, the second layer disposed between the first layer and the third layer. The first layer defines a first port therethrough and at least one of the first layer and third layer defines a second port therethrough to permit fluid flow from the first port to the second port through the flow area.

Klaassen et al. discloses a process for building suspended structures including a etching a cavity in a bottom wafer and fusion bonding a second wafer onto the bottom wafer to forming buried cavities. (Klaassen et al., pp. 556-57 and Figure 1(a)-(e). Gschwendtner et al. discloses a microminature valve having at least one through opening in a first layer and one further through-opening in a second layer.

Nowhere, however, does either Klaassen et al. or Gschwendtner et al. teach or suggest a microvalve with a third layer or one of a first or third layer defining second port therethrough to permit fluid flow from a first port to the second port. Because claim 1 includes at least these two elements not taught or suggested by either Klaassen et al. or Gschwendtner et al., neither reference

alone or in combination could render claim 1 obvious. As such, Applicant respectfully requests withdrawal of this rejection.

Claims 2-43 are each ultimately dependent on claim 1. Thus, for at least this reason, claims 2-43 are not rendered obvious by Klaassen et al. in view of Gschwendter et al., and Applicant respectfully requests withdrawal of this rejection.

Claim 44 recites at least a microvalve comprising a first layer, a second layer defining a flow area, and a third layer, the second layer disposed between the first layer and the third layer. The first layer defines a first port therethrough and at least one of the first layer and third layer defines a second port therethrough to permit fluid flow from the first port to the second port through the flow area. Accordingly, for at least the reasons discussed above with respect to claim 1, claim 44 cannot be rendered obvious by Klaassen et al. in view of Gschwendter et al. As such, Applicant respectfully requests withdrawal of this rejection.

Additionally, with this Communication, Applicant has amended claim 44 to more particularly point out the subject matter that applicant regards as the invention. Specifically, Applicant has replaced the first appearance of the phrase --the cavity region-- with "a cavity region defined by the second layer". Applicant respectfully requests entry of this amendment.

Claims 44-67 are each ultimately dependent on claim 44. Thus, for at least this reason, claims 44-67 are not rendered obvious by Klaassen et al. in view of Gschwendter et al., and Applicant respectfully requests withdrawal of this rejection.

Claim 68 recites at least a microvalve comprising a first layer, a second layer defining a flow area, and a third layer, the second layer disposed between the first layer and the third layer. The first layer defines a first port therethrough and at least one of the first layer and third layer defines a second port therethrough to permit fluid flow from the first port to the second port through the flow area. Accordingly, for at least the reasons discussed above with respect to claim 1, claim 68 cannot be rendered obvious by Klaassen et al. in view of Gschwendter et al. As such, Applicant respectfully requests withdrawal of this rejection.

Claims 69-76 are each ultimately dependent on claim 68. Thus, for at least this reason, claims 69-76 are not rendered obvious by Klaassen et al. in view of Gschwendter et al., and Applicant respectfully requests withdrawal of this rejection.

Independent claims 77, 78 and 80 each recites at least a microvalve comprising a first layer, a second layer defining a flow area, and a third layer, the second layer disposed between the first layer and the third layer. The first layer defines a first port therethrough and at least one of the first layer and third layer defines a second port therethrough to permit fluid flow from the first port to the second port through the flow area. Accordingly, for at least the reasons discussed above with respect to claim 1, claims 77, 78 and 80 cannot be rendered obvious by Klaassen et al. in view of Gschwendter et al. As such, Applicant respectfully requests withdrawal of this rejection.

Claim 79 is dependent on claim 78. Thus, for at least this reason, claim 79 is not rendered obvious by Klaassen et al. in view of Gschwendter et al., and Applicant respectfully requests withdrawal of this rejection.

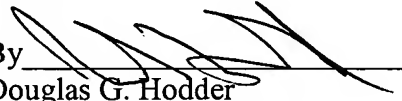
CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 356952000621. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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